

## ABSTRACT

The present invention provides a data processing system for managing and securing a transaction information via a third party. The transaction information comprises a first information associated with a seller and a second information associated with a buyer. The system comprises a first and a second processing apparatuses operated by the third party and the seller, respectively. The first processing apparatus is used for encrypting the second information based on the first information to generate an encrypted second information, and transmitting the first information and the encrypted second information. The second processing apparatus links to the first processing apparatus, stores the first information and the encrypted second information transmitted from the first processing apparatus, and transmits the first information and the encrypted second information back to the first processing apparatus when the seller requests to check the transaction. When the first processing apparatus receives the first information and the encrypted second information from the second processing apparatus, it decrypts the encrypted second information based on the first information to retrieve the transaction information, generates a response information responsive to the request, and transmits the response information to the second processing apparatus. Thus, the transaction information is prevented from being altered by the seller.